EIA-Funded Program Name:

300301 - Science P.L.U.S. Institute

*** Current Fiscal Year EIA Allocation to this EIA-Program:**

2007-08

*** Name of Person Completing Survey and to whom EOC members may request additional information:**

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History of the program. Please mark the appropriate response (choose one):This program:

- ○ Was an original initiative of the Education Improvement Act of 1984
- ○ Was created or implemented as part of the Education Accountability Act of 1998
- ○ Has been operational for less than five years
- ○ Was funded by last fiscal year by general or other funds.
- ○ Is a new program implemented for the first time in the current fiscal year
- ◉ Other

What SC laws, including provisos in the current year's general appropriation act, govern the implementation of this program? Provide complete citations from the SC Code of Laws including Title, Chapter, and Section numbers.

Proviso 1A.16. of the 2007-08 general Appropriation Act

Code of Laws:(MAX. 100 characters)

N/A

Proviso Number:(MAX: 100 characters)

1A.16 of 2007-08 general Appropriation Act

What South Carolina regulations govern the implementation of this program? Provide specific references to the South Carolina Code of Regulations?

Regulations:

Art.25,R43-500.Operation & Funding of Teacher Training Courses in Math,Science,Reading and Comp. Ed.

Do guidelines that have been approved by the State Board of Education, the Commission on higher Education or other governing board exist that govern the implementation of this program?

- ◉ Yes
- ○ No

What are the primary objective(s) or goals of this program? Please distinguish between the long-term mission of the program and the current annual objectives of the program. (The goals or objectives should be in terms that can be quantified, evaluated and assessed.) (MAX 3500 characters)

The goal of the Science P.L.U.S. Institute at Roper Mountain Science Center (RMSC) is to improve student academic achievement by providing professional development opportunities for SC public school educators teaching science in grades 1 through 8. To achieve this goal the Institute

? helps the state close the achievement gap by a) placing 100% of applicants from impaired districts and b) selecting 50% or more of total participants from Title I schools.
? ensures this program serves the entire state, with participation by at least 70 districts.
? keeps the dollar value of classroom science materials given to teacher participants at $500.
? provides challenging instructional activities and practical ideas for teachers to use in their classrooms.
? renews teachers' enthusiasm and build confidence in teaching science.
? emphasizes the use of technology in all classes, with a goal of 90% implementation for 2008.
? offers grade-specific classes aligned with the revised SC Science Academic Standards.
? increases teachers' mastery of content and encourages their focus on instruction and subject understanding, versus just memorizing facts.
? manages EIA funds so that attending teachers and their students receive the maximum benefit, with no more than 45% being used for personnel costs. (Affecting personnel costs - annual COLA for Institute staff.)

In the prior fiscal year, what primary program activities or processes were conducted to facilitate the program's performance in reaching the objective(s) as provided in question 7? What, if any, change in processes or activities are planned for the current fiscal year? (Examples of program processes would be: training provided, recruiting efforts made, technical assistance services, monitoring services, etc. Answers should be specific to the process undertaken at the state level to support the objectives of the program and should be quantifiable Please include any professional development services provided.)(MAX: 5000 characters)

The Science P.L.U.S. Institute achieved the above goals through the following program activities in the prior fiscal year:

? Selected teachers from Title I schools to maintain participation at or above 50% of total participants.

? Placed all applicants from impaired districts.

? Selected 221 teachers initially (including 13 alternates) from 74 of the 74 school districts that had applicants.

? Cut expenses in every possible area to make it possible to maintain the $500 worth of science materials for the classrooms of participating teachers. This was done by maximizing RMSC staff as instructors, decreasing assistant's hours, seeking quantity discounts, and not attending the South Carolina Science Council (SC2) conference.

? Designed courses that were activity-intensive to give teachers necessary content as well as practical lessons and ideas. Teachers received lesson plans for the activities they completed in class along with the materials necessary to duplicate those activities. Teachers learned hands-on, inquiry-based teaching techniques.

? Offered a variety of courses for teachers in grades 1-5; offered 1 course each for grades 6, 7, and 8.

? The grade-specific courses were designed to have teachers participate as active learners, supply science materials to duplicate the activities learned in the Institute, give teachers time to make the displays used in lessons, and incorporate enough course content to give participants a secure background in the subject. These elements build confidence and enthusiasm for teaching a difficult subject.

? Correlated all courses to SC Science Academic Standards.

? Provided enough course content to give participants a secure foundational knowledge in the subject. All classes were inquiry-based and offered a balance of lecture, hands-on activities, and teacher-created displays. Teachers were active learners, unlike lecture-based programs where they are merely passive listeners.

? Assigned 12-month employees of RMSC as instructional staff to save on personnel costs. (Limited to 3 positions in 2007-08.) Their time is contributed by RMSC and Greenville County Schools. Staff salary was increased by 3.31% to match Greenville County Schools COLA.

? Publicized the Science P.L.U.S. Institute by a) mailing posters and brochures to all SC public elementary and middle schools; b) e-mailing all school districts; c) phoning all impaired school principals; d) e-mailing local newspapers across the state; and e) making the application, course outlines, and additional information available on-line.

The 2007-2008 year will have few changes in processes from the above program activities:

? Instructors will increase the technology component of their classes by promoting the use of RMSC's computer lab as well as PowerPoint presentations, Smart Board technology, video streaming, and other on-line resources.

? The EIA funds will be utilized to give maximum benefit to attending teachers and their students, with no more than 35% of the total budget being used for administration costs and 20% for other staff costs.

? The Science P.L.U.S. Institute will be promoted at the SC2 conference where over 1,200 science educators are expected to be in attendance.

In the prior fiscal year and using the most recent data available, what were the direct products and services (outputs) delivered by this program? (Examples of program outputs would be: number of teachers attending professional development seminars, number of AP exams given and students taking AP classes, number of students served in the program, etc.)(MAX: 5000 characters)

The direct products and outputs delivered by the 2007 Science P.L.U.S. Institute at Roper Mountain Science Center (RMSC) were

? Title I Schools were represented by 112 teachers, which is 53.85% of total 208 participants.
? Participants received $500 worth of science materials to teach the hands-on lessons/ activities of the Institute.
? Of the total budget, 28.12% went towards administration costs and 15.9% paid for other staff costs. This was 1% under the projected goal of 45%.
? A total of 208 teachers participated from 69 of 87 school districts (counting charter schools & special schools each as 1 district). (To date, all 87 school districts have been represented at some time since the Institute began in 1993.)
? Based on survey taken 8-9 months after attending Science PLUS, teachers rated their experience in mastery of the content area as 3.86 out of 4 (where 4=highly increased and 1=little change).
? Based on a survey taken 8-9 months after attending Science PLUS, teachers rated the importance of their experience for new ideas and activities as 3.94 out of 4 (where 4=highly important and 1=little importance).
? Based on a survey taken 8-9 months after attending Science PLUS, teachers rated their renewed enthusiasm for teaching science as 3.86 out of 4 (where 4=highly important and 1=little importance).
? Twelve different grade-specific courses were delivered.

Summer 2007 Summary:
? 208 participants from South Carolina public elementary and middle schools
? 6,240 contact hours of instruction
? 13 classes (12 different courses) offered, encompassing grades 1-8
? 171 South Carolina schools represented, 15 for the first time
? 832 South Carolina schools represented since 1993
? 112 Title I School teachers?53.85% of total participants
? 69 of 87 school districts represented (counting charter schools and special schools each as 1 district)
? 7 participants from 4 of the 7 impaired districts
? 184 participants came in 2007 for the first time?88.5% of this year's participants
? 26 instructional positions; 3 unpaid RMSC staff, 23 paid Upstate educators
? Administrative staff-2 (year-round), logistics staff-4 (summer only)
? Alternates replaced 61 of the original teachers selected (29.3% decline rate)
? Participants? teaching experience ranged from 1-38 years (9.3 years average)

Teacher Benefits:
? Each teacher participant received science materials valued at over $500 (totaling $104,000).
? All courses are based on SC Science Academic Standards
? 48 teachers (23.1%) took the course for non-degree graduate credit through Furman University.
? Lodging was provided for 118 out-of-town teachers. (Some shared the cost, in order to have a private room.)

What are the outcomes or results of this program? (Program outcomes can be both quantitative and qualitative and should address the program's objectives. Please use the most recent data available. Examples of outcomes would be: results of surveys, test data, increase in minority participation, reduction in achievement gaps, teacher loans awarded, textbooks purchased, etc.)(MAX: 5000 characters)

Cumulative Summary since 1993:
? 3,340 teacher participants
? 832 South Carolina Schools represented
? 100% of the state?s school districts (87) participated at some time during the history of the Institute (counting charter schools and special schools each as 1 district)

***Please see attached documents e-mailed under separate cover to Melanie Barton.

Program Evaluations

What was the date of the last external or internal evaluation of this program?

July 2007

Has an evaluation been conducted?

(●) Yes ( ) No

If an evaluation was conducted, what were the results and primary recommendations of the evaluation? (MAX: 2000 characters)

March 2007 Survey of 2006 Participants:
Q. Changes in students' achievement and attitudes about science since attending the Science PLUS Institute:

? The students love to come to my class. They have shown great improvements in test scores.-Lisa Young, Florence 1
? My students test scores have skyrocketed! And they LOVE science.-Tonya Weir, Chester
? My students are able to describe science concepts better, in part because I am more confident how to teach the content. My class loves science and their grades in science show it.-Heather Gresham, Lexington 1
? My students' averages this year are the highest they have ever been. I sould say that's terrific praise for my time spent with you last summer.-Tama Byrnes, Greenville
? This was my first year teaching the lower level grade science. There was so much I learned about science that it made teaching so much easier for me. The materials were all I needed to get started. I've also noticed that students who weren't doing well had an improvement in their grades.-Minnie Collins, Lee
? One of my top students has struggled with her science grades in the past. She told me, "I think I know why I did not do well in science before- I didn't know how much fun it could be!"-Amanda Raper, Richland 2

*There were no recommendations made by the teachers who returned the survey.

March 2007 Science P.L.U.S. Institute Survey Results of 2006 Participants

Participants were asked to rate the following as a result of their attending the Institute.
4=Highly Important,3=Important,2=Somewhat Important,1=Little or no Importance

Statements	Average Score
Improved skills in teaching science	*3.95
Materials and supplies for the classroom	*3.94
New ideas and activities for the classroom	*3.94
Renewed enthusiasm for teaching science	*3.86
Increased mastery of content area	*3.86
Reinforcement for the science teaching skills you already had	*3.76
Networking and learning from fellow science teachers	*3.32

Can you provide a URL link, electronic version or hard copy of this evaluation to the Education Oversight Committee?

(●) Yes
( ) No

If no, why not?(MAX: 100 characters)

The following questions do NOT apply to programs having a program code beginning with 01. (These are programs administered by or through the Department of Education. The Office of Finance at the Department of Education will provide answers to these questions.) If your program code begins with 01, please hit the NEXT button below. Once you advance to the next page, hit the SUBMIT button.

Please mark the appropriate response:

The total amount of EIA funds requested for this program for the next fiscal year will be:

- (•) The same as appropriated in the current fiscal year's appropriation
- ( ) An increase over the current fiscal year's appropriation
- ( ) A decrease over the current fiscal year's appropriation

If you indicated an increase or decrease in funding for the next fiscal year, what is the total amount requested for this program for the next fiscal year?

If you indicated an increase or decrease, please describe the reasons for the increase or decrease. How will the increase or decrease impact the objectives of the program as answered in question 7?(MAX: 3500 characters)

Please fill in the attached charts to reflect the budget for this program in the prior fiscal year and the budget for this program in the current fiscal year.

Funding Source	Prior FY Actual	Current FY Estimated
EIA	250,000	250,000
General Fund		
Lottery		
Fees		
Other Sources		
Grant		
Contributions, Foundation		
Other (Specify)		
Carry Forward from Prior Yr		7,583
TOTAL	250,000	257,583

Expenditures	Prior FY Actual	Current FY Estimated
Personal Service	110,052	113,573
Contractual Services	20,023	28,113
Supplies and Materials	112,342	115,897
Fixed Charges		
Travel		
Equipment		
Employer Contributions		
Allocations to Districts/Schools/Agencies/Entities		
Other: Please explain		
Balance Remaining	7,583	
TOTAL	250,000	257,583
#FTES	1.8	1.8

☑ Data entry complete for this year.

Will additional information (eg. charts, tables, graphs, etc.) be submitted under separate cover to EOC for this program? If so, submit to Melanie Barton at mbarton@eoc.sc.gov. The program number should be cited in the subject of the e-mail.

◉ Yes ○ No